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EXAMINER

BLAU, STEPHEN LUTHER

ART UNIT PAPER NUMBER

3711

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,429

Applicant(s)

FAGOT, JACQUES

Examiner

Stephen L. Blau

Art Unit

3711

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,6,9,10,13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,7,8,11,12 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The argument with respect to the objection to the drawings under 37 CFR 1.83(a) is agreed with and as such the objection is removed.

Claim Rejections - 35 USC § 112

2. The argument with respect to claim 1 and the change to claim 7 are agreed with and the rejections under 35 U.S.C. 112, second paragraph are removed.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 5, 8, and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peters in view of Besnard.

Peters discloses a set of club irons each iron of a set having a head, a head having a rear face, a rear face having a cavity bounded by a plurality of walls, wherein a plurality of walls comprises at least one lower wall forming a sole and an upper wall, an upper wall having a plurality of faces, a plurality of faces comprises a rear face, an upper face (Figs. 20-22), a lower face facing the cavity and a plurality of lateral faces, at least one recess in the lower wall in the form of where weight inserts attached (Ref. Nos. 174, 176, 178), a recess being elongated in a main direction of a lower wall (Ref. Nos. 174, 176, 178) at least one recess opens onto a rear face of a lower wall, away from the upper and lower faces of the lower wall, wherein at least one of volume and a position of said at least one recess inside a lower wall varies in distance relative to an upper face from one iron to another, a volume of all the recesses changing, number of recesses changing (Figs. 20, 22), a recess being a small amount compared to the volume of a head (Figs. 20, 22), a set having a center of gravity varying in distance relative to an upper face of an upper wall from one iron to another, and a center of gravity increasing in height from long irons to short irons (Figs. 30-31). Peters does not specifically state that adding additional recesses or additional volume of recesses with weight inserts as shown between figures 20 and 22 would change the center of gravity but clearly an artisan skilled in forming a set of irons with different center of gravities as shown in figures 30-31 would have selected a suitable way to adjust weight distribution in the vertical direction in which using additional recesses of the same volume with weight inserts between irons in a set are included.

Peters lacks at least one recess in the upper wall and said at least one recess opens onto a single face of an upper wall, away from the upper and lower faces, recess being elongated in a main direction of an upper wall, a volume of the recess being between .4 and 5 % of the volume

of the head, at least one of volume and a position of said at least one recess inside an upper wall varies in distance relative to an upper face from one iron to another within a set causing a gravity of each head to vary in distance relative to an upper face from one iron to another, and the number of recesses or volume of recesses decreasing from long irons to short irons.

It would have been obvious to modify the set of irons of Peters to have at least one of volume and a position of said at least one recess inside a lower wall varies in distance relative to an upper face from one iron to another within a set to cause a center of gravity of each head to vary in distance relative to an upper face of an upper wall from one iron to another and the number of recesses or volume changing from long irons to short irons in order to have weights added more protected by being in an insert compared to being attached to a sole as shown in figure 3 of Peters.

Besnard discloses at least one recess in the upper wall and said at least one recess opens onto a single face of an upper wall, away from the upper and lower faces, an recess being elongated in a main direction of an upper wall, and a volume of the recesses compared to a head (Figs. 9-10, 12) in order to position the center of gravity lower (Col. 2, Lns. 37-36). Besnard does not specifically disclose the volume of the recesses compared to a head volume but clearly an artisan skilled in forming a head with a low center of gravity using recesses in an upper wall would have selected a suitable volume for the recesses in which a volume of the recess being between .4 and 5 % of the volume of the head is included. In view of the patent of Besnard it would have been obvious to modify the set of irons of Peters to have at least one recess in the upper wall instead of the lower wall and said at least one recess opens onto a single face of an upper wall, away from the upper and lower faces, a recess being elongated in a main direction of

an upper wall and wherein at least one of volume and a position of said at least one recess inside an upper wall varies in distance relative to an upper face from one iron to another within a set causing a gravity of each head to vary in distance relative to an upper face from one iron to another and the number of recesses or volume of recesses decreasing from long irons to short irons in order to simplify the assembly process by having fewer parts (i.e. no weight inserts). In view of the patent of Besnard it would have been obvious to modify the set of irons of Peters to have a volume of the recess being between .4 and 5 % of the volume of the head in order to have a sufficient amount of weight removed from a top of a head to lower the center of gravity a sufficient distance.

5. Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peters in view of Besnard as applied to claims 1-2, 5, 8, and 11-12 above, and further in view of JP 07213656 and Fenton.

Peters lacks the recess being filled with a low-density material of polyurethane foam. JP 072113656 discloses mounting impact absorbing material on a top edge of a back of an iron to improve feeling (Abstract, Constitution). Fenton discloses an impact absorbing material placed in a recess on a back of an iron being polyurethane (Abstract) in order to have a softness and elasticity to create a substantial lessening of vibration while still having a toughness to prevent abrasion from scratching with resultant damage to clubs (Col. 1, Lns. 24-40). In view of the reference of JP 072113656 it would have been obvious to have the recess being filled with a low-density material in order to improve feeling by absorbing vibrations. In view of the reference of Fenton it would have been obvious to have the recess being filled with polyurethane material in

order to have a softness and elasticity to create a substantial lessening of vibration while still having a toughness to prevent abrasion from scratching with resultant damage to clubs.

Response to Arguments

6. The arguments that the reference of Peters is improper since it does not disclose a recess having a volume or position varied throughout a set of clubs to cause the center of gravity to vary among the members of the set and Peters actually only discloses a sub-set and not a set are disagreed with. First a sub-set is a set of clubs so Peters does disclose a set of clubs having recesses in the form of group designated 158. More than one club makes a set of clubs. Peter also discloses a set of clubs with the loft decreasing, the face area increasing and the center of gravity decreasing for a set of clubs. Clearly the bottom weight of a head must increase. With the loft decreasing it certainly appears that the center of gravity would increase in vertical height. Increasing the total recess volume would be an obvious method to counter the increasing center of gravity height and is probably what is actually done in the sub-set (Group 158) of clubs of Peters. The argument that Peters does not teach heads having a recess since after the inserts are attached to the club there is no opening or cavity at the location of such inserts is disagreed with. The applicant uses the same terminology in claiming a recess filled with a material (Claim 7). The argument that Besnard is improper since Besnard does not disclose at least one of a volume and a position of such a recess varying from one iron to another within a set is disagreed with. Besnard was not used to show this but that it is known to effect center of gravity of a head by

placing a recess at a top of a head instead of a weighted insert in the bottom of a head. Peters was used to show that it would have been obvious to modify the recess volume.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Blau whose telephone number is (703) 308-2712. The examiner is available Monday through Friday from 8 a.m. to 4:30 p.m.. If the examiner is unavailable you can contact his supervisor Greg Vidovich whose telephone number is (703) 308-1513. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is

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(703) 308-0858. (TC 3700 Official Fax 703-872-9306)

slb/ 28 November 2003


STEPHEN BLAU
PRIMARY EXAMINER